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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/273,089	03/19/1999	PATRICK SCHAUMONT	IMEC65.1CPCP	6602

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KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER

FREJD, RUSSELL WARREN

ART UNIT	PAPER NUMBER
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2123

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DATE MAILED: 07/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/23,089

Applicant(s)

Schaumont et al.

Examiner

Russell Frejd

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 25, 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 24-26, 28, and 29 is/are rejected.
- 7) ☒ Claim(s) 2-23, 27, 30, and 31 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 6) ☐ Other:

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Examination of Application #09/273,089

1. Claims 1-31 of application 09/273,089, filed on 19-March-1999, are presented for examination. This application is a CIP of 09/237,549, filed on 26-January-1999.

Claim Rejections under 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by the article of

Yeh et al. (hereinafter Yeh), entitled *OPERAS in a DSP CAD Environment*.

4. Yeh disclosed the invention as claimed, including the OPERAS integrated CAD system (*applicant's claimed design environment*) for DSP system design [page 131, section 2.1, third paragraph]. OPERAS defines a behavioral description being represented as objects with a set of relations between the objects [page 131, section 2.1, fourth paragraph and section 3.1]. Furthermore, Yeh teaches the encapsulation of models within the module for the purpose of re-usage [page 131, section 3, third paragraph].

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Claim Rejections under 35 U.S.C. § 103

5. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

6. Claims 24-26, 28 and 29 are rejected under 35 U.S.C. § 103 as being unpatentable over the article of Yeh et al. (hereinafter Yeh), entitled *OPERAS in a DSP CAD Environment*, in view of U.S. Patent No. 5,544,067, issued to Rostoker et al..

6.1. In regard to claim 24, Yeh disclosed the invention substantially as claimed, including the OPERAS integrated CAD system (*applicant's claimed design environment*) for DSP system design [page 131, section 2.1, third paragraph]. OPERAS defines a behavioral description being represented as objects with a set of relations between the objects [page 131, section 2.1, fourth paragraph and section 3.1]. Furthermore, Yeh teaches the encapsulation of models within the module for the purpose of re-usage [page 131, section 3, third paragraph].

Yeh does not specifically teach using a behavioral register-transfer level design description. However, Rostoker et al. teach designing a circuit by formulating a behavioral

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description of a circuit's desired behavior in a high-level computer language, wherein the designer re-formulates the design as a register-transfer level (RTL) description of the circuit the resulting RTL description then being simulated to ensure that it equates to the original behavioral description [col. 13, lines 34-45]. It would have been obvious for a person of ordinary skill in the art to include an RTL design description such as described by Rostoker et al. in the design description of the present invention because behavioral descriptions do not address the issue of what specific structural components are to be used, wherein in an RTL description, structural components are explicitly identified and there is a direct mapping between this description and the resulting gate-level implementation [Rostoker, col. 14, lines 8-17].

6.2 In regard to claims 25, 26, 28 and 29, Yeh teaches use of the C++ language in the OPERAS simulation environment [page 131, section 3, first paragraph].

Claim Objections

7. Claims 2-23, 27, 30 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Response Guidelines

8. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02, 710.02(b)).

9. Any response to the Examiner in regard to this non-final action should be

directed to: Russell Frejd, telephone number (703) 305-4839, Monday-Friday from 0630 to 1500 ET, or the examiner's supervisor, Kevin Teska, telephone number (703) 305-9704. Any inquiry of a general nature should be directed to the Tech Center 2100 receptionist, telephone number (703) 305-3900. The TC 2100 Customer Service telephone number is (703) 306-5631.

mailed to: Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: (703) 746-7238 (After Final Communications), or
(703) 746-7239 (Official Communications), or
(703) 746-7240 (for Status Inquiries or Draft Communications).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Fourth Floor (Receptionist).

Date: 26-June-2003



**RUSSELL FREJD
PRIMARY EXAMINER**